smaller than the lateral, separated by the radius and from the lateral by a little more. The epigynum strongly convex, the posterior margin strongly convex with a minute notch in the middle, marked with a dark median line and with the receptacles showing through the integument far forward, about their diameter apart.

Holotype male, allotype, female. Raquette Lake, New York, June 11, 1927. Also 2 male paratypes.

## EXPLANATION OF PLATE VII.

- 1. Eperigone augustae. Male, right palpus, ventromesal view.
- 2. Eperigone augustae. Male, tibia of right palpus, dorsal view.
- 3. Epcrigone augustae. Male, tibia of right palpus, dorso-lateral view.

4. Eperigone augustae. Female, epigynum.

- 5. Eperigone augustalis. Male, right palpus, ventromesal view.
- 6. Epcrigone augustalis. Male, tilia of right palpus, dorsal view.
- 7. Eperigone augustalis. Female, epigynum.

## A New Genus and Species of the Dipterous Family Ephydridae Reared from Duck Weed.

By E. T. Cresson, Jr.

Lemnaphila scotlandae\* new genus and species.

The systematic position of this species seems to be in the tribe Hydrelliae of the subfamily Notiphilinae, near the genus *Nostima*. In this treatment I am influenced by the pubescent eyes, development of the antennae, the arrangement of the dorsocentrals and the venation.

I consider the following characteristics of generic importance: Wings normally developed with the costa attaining the fourth vein and the second basal and discal cells united; eyes pubescent; medifacies bare, in profile, concaved, with epistoma protruding; arista with long hairs; dorsocentrals arranged, 0:1.1, the antesutural pair being absent. Additional characters may be gleaned from the following, rather full description of the genotype.

<sup>\*</sup> Genus named on account of the species' fondness for Lemna,

Black; halteres pale yellow; trochanters, femora more or less basally, extremities of tibiae and bases of tarsi, yellowish.

Wings immaculate, hyaline with black veins.

Subopaque with brownish suffusion; frons entirely densely cinereous to niveous from cephalic aspect; upper part of face almost shining, lower part and cheeks opaque black; upper posterior part of mesopleura densely niveous from dorsal as-

pect.

Head almost twice as high as long, distinctly broader than high with concaved occiput closely applied to thorax. Eves large almost height of head, micropubescent. Frons almost twice as broad as long, with anteocellar distance about equal to transverse interocellar distance; profile convex; postocelli situated at the sharp vertex, with the divergent ocellar bristles between the postocelli situated at the sharp vertex, with the divergent ocellar bristles between the postocelli; inner and outer verticals strong; frontalia not differentiated except as blackish wedges mesad of the more or less distinct line limiting the narrow, anteriorly attenuating, parafrons. Face about one-third width of head, in profile, concaved above with obtuse interfoveal carina and strongly protruding epistoma, the epistomal margin well above the line of the buccal orbits; parafacies linear, not dilated below; facialia not marked, with about two fine dorsocinate bristles situated below line of buccal orbit and a few dorsoclinate setulae nearer the parafacial suture. Cheeks very narrow; postbuccal area convex, contiguous with occiput, with one ventroclinate bristle near oral margin. Mouth opening comparatively large, about one-half width of head; tormae narrow, compressed laterally with anterior margin reflexed. Palpi well developed, with several (about three) apical setae. Proboscis short, normal. Antennae large, nearly attaining epistoma, situated well above center-line of eyes; first segment not exserted; second broader than large, bare or microscopically pubescent, without dorsal bristle; third very broad, about one-half width of face, slightly longer than broad, truncate apically, pilose; arista twice as long as third segment, with seven long

Thorax broad as long with convex mesonotum, bare except a few scattered acrostichal setulae; two post-dorsocentrals, the posterior pair much more widely separated than the sutural pair; about three appressed antesutural dorsocentral setulae; no humerals; one small presutural; one weak and one strong notopleurals. Mesopleura with the dorso-posterior area flat, bare, anterior and ventral areas convex and sparsely setulose; pos-

terior margin with one strong bristle. Scutellum triangular, broad as long, flat on disc basally, bare; two apical and two

lateral marginal bristles.

Abdomen broad as thorax, slightly longer than broad, sparingly setulose, setulae not noticeably longer on distal margins of segments; lateral margins sharp. In the male, segments two to three subequal in length, four slightly longer, fifth pointed,

longer than four.

Legs slender, bristling weak. Wings elongate; costa attaining fourth vein with humeral break but none noticeable at tip of first vein; subcosta coinciding with first at middle of costal cell; costal setae distinct but no noticeable bristle at tip of first vein; second vein short making the second costal section slightly shorter than third; veins three and four parallel; ultimate section of four distinctly longer than the preceding; discal cell narrow; posterior crossvein but slightly longer than the anterior one; vein five extending beyond posterior crossvein more than length of the latter. Length, 1.2 mm.

Type.— $\delta$ ; reared by Miss Minnie B. Scotland, from leaf mines in duck weed (*Lemna minor*) collected in a fish hatchery at Fall Creek, Ithaca, New York. Emerged August 25-26, 1933. [A. N. S. P. No. 6501.] *Paratypes.*—11  $\delta$ , 10  $\circ$ ; topotypical.

## Orthoptera to be Found in Winter and Spring in and near Tucson, Arizona.

By Morgan Hebard, Philadelphia, Penna.

After numerous collecting trips in the southwest during the Summer and Fall, I was somewhat surprised to find how very few were the species of Orthoptera which survived during the winter in the comparatively mild climate of Tucson, Arizona and the adjacent foothills: Rare examples of *Trimerotropis pallidipennis pallidipennis* (Burmeister) and *Heliastus parviceps* (Walker) were seen at wide intervals and even fewer individuals of *Schistocerca vaga vaga* (Scudder).

In April, 1932, almost the same as winter conditions persisted in that general region though I saw for the first time the desert green and a great variety of plants and shrubs in

<sup>&</sup>lt;sup>1</sup>In recent literature this species usually has appeared as the synonym *Heliastus aridus* (Bruner).